## Background and Business Problems

## **BACKGROUND**

According to Caltrans' records, there were seven accidents attributable to permit writer error in 1999. One of these accidents resulted in a fatality; the remaining accidents resulted in damages/losses sustained by owners/operators, extensive damage and costly repairs to State property, traffic delays and congestion. Following the fatal accident, Legislative hearings and a Bureau of State Audits audit were conducted to gain an understanding of the problem and its root causes. The weaknesses of the current system are detailed in the following section entitled "Business Problems". As a result of the Legislative hearings, the Director of Caltrans committed the Department to taking the necessary steps to eliminate accidents caused by Caltrans permit routing errors.

The Transportation Permits Management System (TPMS) project is the long-term solution to many of the current business problems. TPMS will prevent the issuance of erroneous permits. TPMS will eliminate handwritten permits and establish a standard format for the route description. Permits will be issued electronically, improving legibility and turnaround times. TPMS will incorporate ergonomic design features, decreasing clutter and improving readability.

The Office of Truck Services, which has responsibility for managing the Transportation Permits Branch, has implemented several short-term solutions to some of the current problems, while addressing other problems immediately. The most significant change is the double-checking of all overheight permits. Since August 2, 1999, all permits for loads over 14' high have been double-checked by a second permit writer before being released to the customer. Caltrans was authorized to hire fifteen new permit writers to support the double-checking effort. While double-checking has reduced permit writer errors, there were still three permit error-related accidents between 8/2/99 and 3/1/01.

## **BUSINESS PROBLEMS**

The principal problems with the existing system and processes are:

- The existing system is ineffective. Specifically, the existing system of manual and electronic processes:
  - Fails to protect the public or the Department in terms of personal injury, death, and vehicle, equipment, and property damage. It lacks the necessary controls to ensure that issued permits are free of errors that could endanger life or property. A permit with such an error has resulted in one fatality and others have resulted in considerable damage to State and private property. In August 1999, Caltrans implemented a procedure to manually double-check all Single Trip Permits over 14' high. In spite of this procedure, there were three bridge hits due to routing errors between August 2, 1999 and March 1, 2001.
  - Does not support the issuance of electronically prepared permits in a standard format. Instead, permits are generally sent by fax. Further, the handwritten permits are sometimes difficult to read. This has led to the misreading of route information and improper exiting from an approved route. In a number of cases, this has resulted in collisions with bridges. Such "off route" incidents result in private property damage, the expenditure of State funds to repair damage to State property, and injuries

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- The existing system is inefficient. Specifically:
  - The existing system is labor intensive and is expensive to support. Specifically, due to the inadequacies of the current system, which could result in the issuance of a potentially unsafe permit, the Transportation Permits Office has required an independent review, or double-check, of all Single Trip Permits over 14' high.
  - The existing system takes 2 to 4 hours to issue a permit following receipt of the request. Such delays impact the requestor's profits because they cannot operate their vehicles until they receive the permit. These delays result in significant lost opportunity costs to the owners/operators and industry. With a properly designed system, most permits could be issued within five minutes from receipt of request.